

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TENNESSEE
KNOXVILLE DIVISION

TRAVELERS INDEMNITY COMPANY,)	
as subrogee of SMOKY MOUNTAIN LASER)	
and IDM, INC.,)	
)	CIVIL ACTION NO. 3:02-CV-491
Plaintiff,)	(Phillips/Guyton)
)	
vs.)	
)	
INDUSTRIAL PAPER & PACKAGING)	
CORP., et al.,)	
)	
Defendants.)	

MEMORANDUM AND OPINION

Plaintiff¹ has filed the instant action alleging that the accumulation of defective and/or unreasonably dangerous diffusion fluid aided in the spread of a building fire. Defendants, Ronald Ogle and Ogle's Repair Company ("Ogle and Ogle's Repair"), have filed a motion in limine to exclude one of plaintiff's experts [Doc. 99]. The plaintiff has opposed the motion by filing a response, and the defendants have replied. For the reasons that follow, defendants' motion in limine is **GRANTED in part** and **DENIED in part**.

¹For the purposes of this Memorandum and Opinion, the terms "plaintiff" shall refer to the arcade and its operators, as well as to Travelers Indemnity.

I. Summary of the Facts

The fire that is subject of this lawsuit occurred on September 11, 1999, and damaged Q-Zar Amusement Center located at 716 Parkway, Gatlinburg, Tennessee. This was an arcade business owned by Smoky Mountain Laser and IDM, Inc. ("Smokey Mountain"). The amusement complex was a two-story building. The first floor contained a concession area, video machines, and a laser instruction room. The second floor contained a laser arena that consisted of a maze of walkways to target centers.

The fire is alleged to have originated in a 15-ton HVAC unit and to have spread through the unit's duct system due to an accumulation of diffusion fluid in the HVAC system. It appears that diffusion fluid was used in the fogging machines for the laser tag operations. The Fire Marshal's report indicates that the fire originated in the HVAC duct work and that the source of the heat was the HVAC motor.

According to defendants, plaintiffs' claims against them are based upon the allegation that Ogle serviced the HVAC system on September 3, 1999, eight days before the fire, and that the defendants failed to warn of or remove the accumulation of diffusion fluid in the HVAC system.

The fire caused \$736,343.66 in damages. This figure includes \$413,243.81 for the building, \$198,432.85 for the content, and \$124,667.00 for lost profits.

II. Motion in Limine to Exclude Plaintiff Expert Robert L. Fowler

A. *Background*

Defendants, Ogle and Ogle's Repair, seek to exclude the testimony of fire investigator Rodney L. Fowler ("Fowler") [Doc. 99]. Essentially, Ogle and Ogle's Repair assert (1) that Fowler is not qualified as required by Fed. R. Evid. 702 to render an opinion regarding the conduct and duties of defendants, Ogle and Ogle's Repair, and (2) that Fowler's opinions regarding the cause and origin of the fire are not based on sufficient facts, data, or reliable scientific method to pass muster under Rule 702 and *Daubert*. Since plaintiff concedes that Fowler is not qualified to offer an opinion on air conditioning repair work and/or any duties that Ogle and Ogle's Repair may or may not have had, the Court limits its discussion to the admissibility of Fowler's opinion regarding the cause and origin of the fire.

According to his report and testimony, Fowler opines that the fire originated in the exhaust fan motor in a 15-ton HVAC unit and that ignited diffusion fluid spread throughout the HVAC unit and duct work. Ogle and Ogle's Repair attack the reliability of this opinion in that Fowler did not conduct scientific testing to support his position. Specifically, Ogle and Ogle's Repair state that Fowler did not conduct testing regarding the combustibility/flammability of the diffusion fluid; how long it might take for the fluid to accumulate to a level that it might become a fire hazard; and whether diffusion fluid was even present in the HVAC unit/ducts in the days leading up to the fire. Ogle and Ogle's

Repair note that Fowler has no personal knowledge or observation to bear out his assumption that diffusion fluid was present, and further, that Fowler did not take any samples from any fire scene substantiating that diffusion fluid was present. Accordingly, Ogle and Ogle's Repair argue that Fowler's testimony regarding cause and origin of the fire involving diffusion fluid should be excluded.

In response, plaintiff asserts that Fowler is a qualified fire investigator, listing his education, experience, association memberships, and job history in the area of fire investigation. Plaintiff also states that Fowler's testimony is reliable and therefore admissible. In this regard, plaintiff states that Fowler describes specifically the evidence examined, the witnesses he interviewed, and the documents he reviewed; relied upon the finding of a chemist, Andrew T. Armstrong, Ph.D., CPC; and used his training and experience in his assessment, all of which were used as the basis of his opinions in this case. In forming his opinions, Fowler relied upon, among other things, the statements he received from two witnesses to the fire (Stephanie Ann Bible and Brian S. Ali), his discussion with Fire Marshal Kenneth Ogle, the information in the Material Safety Data Sheet for the diffusion fluid, his inspection and examination of the fire scene (including his examination of the air conditioning unit), his interview of defendant, Ronald Ogle, as well as his training and experience.

That being said, plaintiff asserts that no testing was needed in that Fowler's conclusions were developed by cognitive processes and that these processes were appropriate for the fire investigation. In support, plaintiff cites part of Section 2-3.6 of the

National Fire Protection Association 921, Guide for Fire and Explosion Investigations ("NFPA 921"), 1998 Ed.:

The investigator does not have a truly provable hypothesis unless it can stand the test of careful and serious challenge. This is done by the principle of deductive reasoning, in which the investigator compares his or her hypothesis to all known facts. If the hypothesis cannot withstand an examination by deductive reasoning, it should be discarded as not provable and a new hypothesis tested. This may include the collection of new data or the re-analysis of existing data.

Moreover, in regard to testing/sampling, Fowler testified that the diffusion fluid is consumed in a flash fire, indicating that any testing/sampling was futile. Fowler states that he relied upon eye witness accounts to substantiate the presence of diffusion fluid. In regard to scientific testing of characteristics or propensities of diffusion fluid, plaintiff asserts that Fowler's testimony is aided by Dr. Armstrong, who will testify about the combustible nature and flammability of diffusion fluid, as well as the chemical make-up of the fluid.

Lastly, plaintiff states that Fowler's testimony is relevant. Specifically, plaintiff states that an expert qualified in assessing, evaluating, and describing the type of fire at issue would assist the layperson who must determine the facts. Plaintiff asserts that the average jury is not expected to possess the degree of knowledge or skill held by a fire investigator and that such an expert is crucial to understanding all of the allegations.

In reply, Ogle and Ogle's Repair continue to oppose Fowler's testimony on cause and origin. Ogle and Ogle's Repair repeat that Fowler admitted that he had no personal knowledge or observation of diffusion fluid being present in the HVAC system; he conducted no testing to determine the presence of diffusion fluid in the system; he has

never conducted any scientific testing upon which to base his hypothesis that diffusion fluid in the HVAC system caused the fire; and he has never conducted testing of any kind on diffusion fluid in any context. Ogle and Ogle's Repair argue that permitting Fowler to testify using cognitive thought processes without testing would be ignoring the requirements set forth in Rule 702 and *Daubert*, i.e. that the expert's opinions be based on good science and valid scientific principles.

B. Law and Analysis

A district court is not required to hold a hearing to address a *Daubert* issue. See *Greenwell v. Boatwright*, 184 F.3d 492, 498 (6th Cir. 1999). Since the Court finds that a formal hearing is unnecessary, the Court exercised its discretion to forgo the proceeding.

The admissibility of expert testimony in a federal court is primarily governed by Fed.

R. Evid. 702, which provides:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education may testify thereto in the form of an opinion or otherwise.

With this in mind, a court must undertake a two-tiered inquiry when determining the admissibility of expert testimony. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 589, 113 S.Ct. 2786, 2795, 125 L.Ed.2d 469 (1993); *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 152, 119 S.Ct. 1167, 1176, 143 L.E.d.2d 238 (1999); *United States v. Smithers*, 212 F.3d 306, 315 (6th Cir. 2000). The first inquiry for a court's

consideration is whether the reasoning or methodology underlying the expert's testimony is scientifically valid (reliability), and the second inquiry is whether that reasoning or methodology could be properly applied to the facts at issue to aid the trier of fact (relevance). *Id.* In the instant matter, the issue is whether the testimony of the plaintiff's expert is reliable, that is, based on scientific, technical, or other specialized information.² The plaintiff bears the burden of demonstrating that its expert testimony comports with "sound science." See *Smelser v. Norfolk S. Ry. Co.*, 105 F.3d 299, 303 (6th Cir. 1997)

In regard to reliability, a court must carefully assess the methodology, reasoning, or technique that is employed by the expert to determine whether the expert's opinion is based on scientifically valid principles pursuant to Fed. R. Evid. 702.³ See *Pride v. BIC Corp.*, 218 F.3d 566, 577 (6th Cir. 2000), *Smithers*, 212 F.3d at 313; *Smelser*, 105 F.3d at 303. An expert's opinion may not be the expert's subjective belief or essentially unsupported speculation. *Smelser*, 105 F.3d at 303. In *Daubert*, the Supreme Court identified several factors to assist courts in evaluating whether a scientific theory or methodology constitutes reliable scientific knowledge. These include: (1) whether the theory or technique can be or has been tested; (2) whether the theory has been subjected to peer review and publication; (3) whether a technique has a known or potential rate of

²The Court finds that the relevancy inquiry is satisfied. The expert testimony deals with a complex area of expertise of which a lay person would commonly have no knowledge, and the defendants have not argued otherwise. Additionally, Fowler's testimony "fits the facts" in this case. Thus, the Court's review is focused solely upon the reliability of Fowler's testimony.

³The reliability of the proffered expert testimony must involve an initial determination that the proffered expert witness is qualified to render an expert opinion in the designated area. Here, the parties do not dispute that Fowler is qualified to testify in the area of fire investigation. Further, the Court is satisfied with Fowler's qualifications.

error and whether there are standards controlling the technique's operation; and (4) whether the theory or method has general acceptance in the scientific community. *Daubert*, 509 U.S. at 593-94, 113 S.Ct. at 2796-97.⁴ However, the analysis of reliability is flexible, and its indicators may vary from discipline to discipline. *Daubert*, 509 U.S. at 593, 113 S.Ct. at 2786; *Abon, Ltd. v. Transcontinental Ins.*, 2005 WL 1414486 (Ohio Ct. App. 5th June 16, 2005), *appeal not allowed*, 105 Ohio St. 3d 1408, 836 N.E.2d (2005); see also, *Moore v. Ashland Chem. Inc.*, 126 F.3d 679, 686-88 (5th Cir. 1997).

In this regard, the expert's opinion must be based on methods and procedures that meet the level of intellectual rigor demanded by the relevant discipline. See *In re: Paoli*, 35 F.3d 717, 742 (3rd Cir. 1994). The proposed testimony must be supported by appropriate validation, otherwise stated, "good grounds" based on what is known. *Id.*; *Daubert*, 509 U.S. at 590, 113 S.Ct. at 2795. The grounds for an expert's opinion merely have to be good; they do not have to be perfect. *Paoli*, 35 F.3d at 744.

The Court recognizes that NFPA 921 is a peer reviewed and generally accepted standard in the fire investigation community. *Royal Inc. Co. of Am. v. Joseph Daniel Constr., Inc.*, 208 F.Supp.2d 423, 426-27 (S.D.N.Y. 2002); *Travelers Prop. & Cas. Corp. v. Gen. Elec. Co.*, 150 F.Supp.2d 360, 366 (D.Conn. 2001); *Abon, Ltd.*, 2005 WL 1414486 at *10. Section 2-3.6 of the NFPA 921 recognizes the process of deductive reasoning as

⁴The *Kumho Tire Co.* Court made it clear that the reliability analysis adopted in *Daubert* for scientific experts also applied to experts with other types of technical or specialized knowledge. *Kumho Tire Co., Ltd.*, 526 U.S. at 147, 119 S.Ct. at 1174.

an appropriate methodology for determining the cause and origin of a fire. The courts have also found deductive reasoning to be credible, scientific reasoning. *Royal Inc. Co.*, 208 F.Supp.2d at 427; *Travelers Property & Cas. Corp.*, 150 F.Supp.2d at 366; *Abon, Ltd.*, 2005 WL 1414486 at *10-11. Although some courts have found that a failure to test may disqualify a witness from testifying, *Coffey v. Dowley Mfg., Inc.*, 187 F.Supp.2d 958, 977 (M.D.Tenn. 2002), *aff'd*, *Coffey v. Dowley Mfg. Inc.*, 89 Fed.Appx. 927 (6th Cir. 2003); *Pride v. BIC Corp.*, 218 F.3d 566, 578 (6th Cir. 2003), expert testimony has been held to be consistent with NFPA 921 and satisfy *Daubert* without independent testing. *Donegal Mut. Ins. v. White Consolidated Ins.*, 2006 WL 827362, at *7 (Ohio App. 2d Mar. 31, 2006); *McCoy v. Whirlpool Corp.*, 2003 WL 1923016, at *3-4 (D.Kan. Apr. 21, 2003); see also *Abon, Ltd.*, 2005 WL 1414486 at *9.

In the instant matter, it is undisputed that Fowler specifically describes the evidence examined, the witnesses he interviewed, the documents he reviewed; relied upon the findings of a chemist; and applied his training and experience, all of which he used as the basis of his opinions in this case. Further, it is undisputed that in developing his opinions, Fowler relied upon, among other things, the statements he received from two witnesses to the fire (Stephanie Ann Bible and Brian S. Ali), his discussion with Fire Marshal Kenneth Ogle, the information in the Material Safety Data Sheet for the diffusion fluid, his inspection and examination of the fire scene (including his examination of the air conditioning unit), his interview of defendant Ronald Ogle, as well as his training and experience. Moreover, in his report, Fowler “ruled out” possible scenarios, stated that the ignition source and materials ignited are consistent with all data gathered, and discussed the cognitive

processes used in determining cause and origin.

Although Ogle and Ogle's Repair state that the plaintiff's expert merely states assumption upon assumption and that testing was a necessary step to forming a proper expert opinion, the Court is not convinced. According to Fowler's testimony and upon the Court's reflection, the diffusion fluid was consumed in the flash fire (indicating that there was nothing to be found in sampling), and further, sampling in other areas of the building is not conclusive that diffusion fluid would be present in the engulfed areas. Nevertheless, Fowler relied upon eye witnesses accounts that diffusion fluid was present in the HVAC system. In regard to testing the properties/make-up of the diffusion fluid, plaintiff states that an expert chemist provides such testimony.⁵ In addition, the Court notes that the defendants do not present facts or evidence contradicting the physical evidence, but merely state that testing was necessary.

In the case at bar, Fowler followed methods and principles deemed valid by the relevant discipline to reach his opinion. The testimony of Fowler has a reliable basis in the knowledge and experience of the relevant discipline. *Kumho*, 526 U.S. 137, 119 S.Ct. 1167; *Abon, Ltd.*, 2005 WL 1414486 at *11. The concerns of Ogle and Ogle's Repair about Fowler's testimony go more to the weight of the evidence rather than to its admissibility.⁶

⁵Defendants, Ogle and Ogle's Repair, have not filed a *Daubert* challenge to the admissibility of Dr. Armstrong's testimony.

⁶In this regard, the Supreme Court in *Daubert* states that following:

Vigorous cross-examination presentation, presentation of contrary evidence, and

In summation, Fowler's opinions regarding duty, breach, act, and/or omission on part of Ogle and Ogle's Repair are inadmissible or excluded. However, Fowler is permitted to testify as to the cause and origin of the fire.

CONCLUSION

For the reasons hereinabove set forth, defendant's motion in limine is **GRANTED in part and DENIED in part.**

IT IS SO ORDERED.

ENTER:

s/Thomas W. Phillips
United States District Judge

careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence. Additionally, in the event the trial court concludes that the scintilla of evidence presented supporting a position is insufficient to allow a reasonable juror to conclude that the position more likely than not is true, the court remains free to direct a judgement, Fed. Rule Civ. Proc. 50(a), and likewise to grant summary judgment, Fed. Rule Civ. Proc. 56.... These conventional devices, rather than wholesale exclusion under an uncompromising "general acceptance" test, are the appropriate safeguards where the basis of scientific testimony meets the standards of Rule 702.

Daubert, 509 U.S. at 596, 113 S.Ct. at 2798 (internal citations omitted).